



012889-086.ST25

SEQUENCE LISTING

<110> Wastfelt, Maria K. Boden  
Flock, Jan-Ingmar

<120> Fibrinogen Binding Protein

<130> 012889-086

<140> US 09/938,497

<141> 2001-08-27

<150> US 09/276,141

<151> 1999-03-25

<150> PCT/SE93/00759

<151> 1993-09-20

<150> SE 9302955-01

<151> 1993-09-13

<150> SE 9202720-0

<151> 1992-09-21

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<213> Staphylococcus aureus

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Lys Tyr Gly Thr

20

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<212> PRT

<213> Staphylococcus aureus

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10

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<213> Staphylococcus aureus

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 Lys Asn Gly Thr  
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<210> 4  
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 Lys Asn Gly Thr  
 20

<210> 5  
 <211> 20  
 <212> PRT  
 <213> Staphylococcus aureus

<400> 5  
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 1 5 10 15  
 Asn Ile Val Glu  
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<210> 6  
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 <212> PRT  
 <213> Staphylococcus aureus

<400> 6  
 Met Tyr Pro Glu Lys Lys Pro Val  
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<210> 7  
 <211> 408  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> nucleotide sequence for fibrinogen-binding protein

<400> 7  
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 gtacaatgat ggtacttttta aatatcaatc tagaccacaaa tttaactcaa cacctaaata 120  
 tattaaattc aaacatgact ataataatttt agaatttaac gatggtacat tcgaatatgg 180  
 tgcacgtcca caatttaata aaccagcagc gaaaactgat gcaactatta aaaaagaaca 240  
 aaaattgatt caagctcaaa atcttgtgag agaatttgaa aaaacacata ctgtcagtg 300  
 acacagaaaa gcacaaaagg cagtcaactt agtttcgttt gaatacaaag tgaagaaaat 360  
 ggtcttacaa gagcgaattg ataatgtatt aaaacaagga ttagtgag 408

<210> 8  
 <211> 136

<212> PRT  
 <213> Artificial Sequence

<220>  
 <223> fibrinogen-binding protein

<400> 8  
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 1 5 10 15  
 Asn Ile Val Glu Tyr Asn Asp Gly Thr Phe Lys Tyr Gln Ser Arg Pro  
 20 25 30  
 Lys Phe Asn Ser Thr Pro Lys Tyr Ile Lys Phe Lys His Asp Tyr Asn  
 35 40 45  
 Ile Leu Glu Phe Asn Asp Gly Thr Phe Glu Tyr Gly Ala Arg Pro Gln  
 50 55 60  
 Phe Asn Lys Pro Ala Ala Lys Thr Asp Ala Thr Ile Lys Lys Glu Gln  
 65 70 75 80  
 Lys Leu Ile Gln Ala Gln Asn Leu Val Arg Glu Phe Glu Lys Thr His  
 85 90 95  
 Thr Val Ser Ala His Arg Lys Ala Gln Lys Ala Val Asn Leu Val Ser  
 100 105 110  
 Phe Glu Tyr Lys Val Lys Lys Met Val Leu Gln Glu Arg Ile Asp Asn  
 115 120 125  
 Val Leu Lys Gln Gly Leu Val Arg  
 130 135

<210> 9  
 <211> 1009  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> fib protein

<221> CDS  
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 aataaatgta agataataat ttggaggata attaac atg aaa aat aaa ttg ata 174  
 Met Lys Asn Lys Leu Ile  
 1 5  
 gca aaa tct tta tta aca ata gcg gca att ggt att act aca act aca 222  
 Ala Lys Ser Leu Leu Thr Ile Ala Ala Ile Gly Ile Thr Thr Thr Thr  
 10 15 20  
 att gcg tca aca gca gat gcg agc gaa gga tac ggt cca aga gaa aag 270  
 Ile Ala Ser Thr Ala Asp Ala Ser Glu Gly Tyr Gly Pro Arg Glu Lys  
 25 30 35  
 aaa cca gtg agt att aat cac aat atc gta gag tac aat gat ggt act 318  
 Lys Pro Val Ser Ile Asn His Asn Ile Val Glu Tyr Asn Asp Gly Thr  
 40 45 50

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ttt aaa tat caa tct aga cca aaa ttt aac tca aca cct aaa tat att 366
Phe Lys Tyr Gln Ser Arg Pro Lys Phe Asn Ser Thr Pro Lys Tyr Ile
55 60 65 70

aaa ttc aaa cat gac tat aat att tta gaa ttt aac gat ggt aca ttc 414
Lys Phe Lys His Asp Tyr Asn Ile Leu Glu Phe Asn Asp Gly Thr Phe
75 80 85

gaa tat ggt gca cgt cca caa ttt aat aaa cca gca gcg aaa act gat 462
Glu Tyr Gly Ala Arg Pro Gln Phe Asn Lys Pro Ala Ala Lys Thr Asp
90 95 100

gca act att aaa aaa gaa caa aaa ttg att caa gct caa aat ctt gtg 510
Ala Thr Ile Lys Lys Glu Gln Lys Leu Ile Gln Ala Gln Asn Leu Val
105 110 115

aga gaa ttt gaa aaa aca cat act gtc agt gca cac aga aaa gca caa 558
Arg Glu Phe Glu Lys Thr His Thr Val Ser Ala His Arg Lys Ala Gln
120 125 130

aag gca gtc aac tta gtt tcg ttt gaa tac aaa gtg aag aaa atg gtc 606
Lys Ala Val Asn Leu Val Ser Phe Glu Tyr Lys Val Lys Lys Met Val
135 140 145 150

tta caa gag cga att gat aat gta tta aaa caa gga tta gtg aga taa 654
Leu Gln Glu Arg Ile Asp Asn Val Leu Lys Gln Gly Leu Val Arg *
155 160 165

tacttctgtc attatttttaa gttcaaaata atttaatat attattatatt ttattaataa 714
aacgactatg ctattttaatg ccagggttaat gtaactttcc taaaattgac tatataatcg 774
ttaagtatca atttttaagga gagttttaca atg aaa ttt aaa aaa tat ata tta 827
Met Lys Phe Lys Lys Tyr Ile Leu
170

aca gga aca tta gca tta ctt tta tca tca act ggg ata gca act ata 875
Thr Gly Thr Leu Ala Leu Leu Leu Ser Ser Thr Gly Ile Ala Thr Ile
175 180 185

gaa ggg aat aaa gca gat gca agt agt ctg gac aaa tat tta act gaa 923
Glu Gly Asn Lys Ala Asp Ala Ser Ser Leu Asp Lys Tyr Leu Thr Glu
190 195 200 205

agt cag ttt cat gat aaa cgc ata gca gaa gaa tta aga act tta ctt 971
Ser Gln Phe His Asp Lys Arg Ile Ala Glu Glu Leu Arg Thr Leu Leu
210 215 220

aac aaa tcg aat gta tat gca tta gct gca gga agc tt 1009
Asn Lys Ser Asn Val Tyr Ala Leu Ala Ala Gly Ser
225 230

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&lt;210&gt; 10

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; fib protein

&lt;400&gt; 10

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Met Lys Asn Lys Leu Ile Ala Lys Ser Leu Leu Thr Ile Ala Ala Ile
 1           5           10           15
Gly Ile Thr Thr Thr Thr Ile Ala Ser Thr Ala Asp Ala Ser Glu Gly
          20           25           30
Tyr Gly Pro Arg Glu Lys Lys Pro Val Ser Ile Asn His Asn Ile Val
          35           40           45
Glu Tyr Asn Asp Gly Thr Phe Lys Tyr Gln Ser Arg Pro Lys Phe Asn
          50           55           60
Ser Thr Pro Lys Tyr Ile Lys Phe Lys His Asp Tyr Asn Ile Leu Glu
          65           70           75           80
Phe Asn Asp Gly Thr Phe Glu Tyr Gly Ala Arg Pro Gln Phe Asn Lys
          85           90           95
Pro Ala Ala Lys Thr Asp Ala Thr Ile Lys Lys Glu Gln Lys Leu Ile
          100          105          110
Gln Ala Gln Asn Leu Val Arg Glu Phe Glu Lys Thr His Thr Val Ser
          115          120          125
Ala His Arg Lys Ala Gln Lys Ala Val Asn Leu Val Ser Phe Glu Tyr
          130          135          140
Lys Val Lys Lys Met Val Leu Gln Glu Arg Ile Asp Asn Val Leu Lys
          145          150          155          160
Gln Gly Leu Val Arg
                  165

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&lt;210&gt; 11

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; fib protein

&lt;400&gt; 11

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Met Lys Phe Lys Lys Tyr Ile Leu Thr Gly Thr Leu Ala Leu Leu Leu
 1           5           10           15
Ser Ser Thr Gly Ile Ala Thr Ile Glu Gly Asn Lys Ala Asp Ala Ser
          20           25           30
Ser Leu Asp Lys Tyr Leu Thr Glu Ser Gln Phe His Asp Lys Arg Ile
          35           40           45
Ala Glu Glu Leu Arg Thr Leu Leu Asn Lys Ser Asn Val Tyr Ala Leu
          50           55           60
Ala Ala Gly Ser
          65

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&lt;210&gt; 12

&lt;211&gt; 781

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; fib gene from strain FDA 486

&lt;400&gt; 12

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atagataact atatTTTgtc tatattataa agtgtttata gttAattaat aattagttAA 60
tttcaaaagt tgtataaata ggataactta ataaatgtaa gataataatt tggaggataa 120
ttaacatgaa aaataaattg atagcaaaat ctttattaac aatagcggca attggtatta 180
ctacaactac aattgcgtca acagcagatg cgagcgaagg atacggtcca agagaaaaga 240

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aaccagtga  tattaatcac  aatatcgtag  agtacaatga  tggtagctttt  aaatatcaat  300
ctagaccaaa  atttaactca  acacctaaat  atattaaatt  caaacatgac  tataatattt  360
tagaatttaa  cgatgggtaca  ttccaatgat  gtgcacgtcc  acaatttaat  aaaccagcag  420
cgaaaactga  tgcaactatt  aaaaaagaac  aaaaattgat  tcaagctcaa  aatcttgtga  480
gagaatttga  aaaaacacat  actgtcagtg  cacacagaaa  agcacaaaag  gcagtcaact  540
tagtttcgtt  tgaatacaaa  gtgaagaaaa  tgggtcttaca  agagcgaatt  gataatgtat  600
taaaacaagg  attagtga  taatacttct  gtcattattt  taagttcaaa  ataatttaat  660
attatattat  tttttattaa  taaaacgact  atgctattta  atgccagggt  aatgtaactt  720
tcctaaaatt  gactatataa  tcgttaagta  tcaattttta  ggagagttta  caatgaaatt  780
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<210> 13  
 <211> 785  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> fib gene from strain Newman

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tttcaaaagt  tgtataaata  ggataactta  ataaatgtaa  gataataatt  tggaggataa  120
ttgacatgaa  aaatgcattg  atagcaaaat  ctttattaac  attagcggca  ataggtatta  180
ctacaactac  aattgcgtca  acagcagatg  cgagcgaagg  atacggtcca  agagaaaaga  240
aaccagtga  tattaatcac  aatatcgtag  agtacaatga  tggtagctttt  aaatatcaat  300
ctagaccaaa  atttaactca  acacctaaat  atattaaatt  caaacatgac  tataatattt  360
tagaatttaa  cgatgggtaca  ttccaatgat  gtgcacgtcc  acaatttaat  aaaccagcag  420
cgaaaactga  tgcaactatt  aaaaaagaac  aaaaattgat  tcaagctcaa  aatcttgtga  480
gagaatttga  aaaaacacat  actgtcagtg  cacacagaaa  agcacaaaag  gcagtcaact  540
tagtttcgtt  tgaatacaaa  gtgaagaaaa  tgggtcttaca  agagcgaatt  gataatgtat  600
taaaacaagg  attagttaaa  taaaacttca  atcggttgctg  ttatctggaa  ataatttaatt  660
aaatgttatg  ttaatttttg  ttaatgaaaa  aagtaattcta  tttaatgaca  gggttaatgta  720
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aattt

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<210> 14  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> fib gene from strain 486

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<400> 14
Met Lys Asn Lys Leu Ile Ala Lys Ser Leu Leu Thr Ile Ala Ala Ile
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Gly Ile Thr Thr Thr Ile Ala Ser Thr Ala Asp Ala Ser Glu Gly
20      25      30
Tyr Gly Pro Arg Glu Lys Lys Pro Val Ser Ile Asn His Asn Ile Val
35      40      45
Glu Tyr Asn Asp Gly Thr Phe Lys Tyr Gln Ser Arg Pro Lys Phe Asn
50      55      60
Ser Thr Pro Lys Tyr Ile Lys Phe Lys His Asp Tyr Asn Ile Leu Glu
65      70      75      80
Phe Asn Asp Gly Thr Phe Glu Tyr Gly Ala Arg Pro Gln Phe Asn Lys
85      90      95
Pro Ala Ala Lys Thr Asp Ala Thr Ile Lys Lys Glu Gln Lys Leu Ile
100     105     110
Gln Ala Gln Asn Leu Val Arg Glu Phe Glu Lys Thr His Thr Val Ser

```

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      115              120              125
Ala His Arg Lys Ala Gln Lys Ala Val Asn Leu Val Ser Phe Glu Tyr
    130              135              140
Lys Val Lys Lys Met Val Leu Gln Glu Arg Ile Asp Asn Val Leu Lys
    145              150              155              160
Gln Gly Leu Val Arg
                    165

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<210> 15  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> fib gene from strain Newman

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<400> 15
Met Lys Asn Ala Leu Ile Ala Lys Ser Leu Leu Thr Leu Ala Ala Ile
  1              5              10              15
Gly Ile Thr Thr Thr Thr Ile Ala Ser Thr Ala Asp Ala Ser Glu Gly
      20              25              30
Tyr Gly Pro Arg Glu Lys Lys Pro Val Ser Ile Asn His Asn Ile Val
    35              40              45
Glu Tyr Asn Asp Gly Thr Phe Lys Tyr Gln Ser Arg Pro Lys Phe Asn
    50              55              60
Ser Thr Pro Lys Tyr Ile Lys Phe Lys His Asp Tyr Asn Ile Leu Glu
    65              70              75              80
Phe Asn Asp Gly Thr Phe Glu Tyr Gly Ala Arg Pro Gln Phe Asn Lys
      85              90              95
Pro Ala Ala Lys Thr Asp Ala Thr Ile Lys Lys Glu Gln Lys Leu Ile
    100              105              110
Gln Ala Gln Asn Leu Val Arg Glu Phe Glu Lys Thr His Thr Val Ser
    115              120              125
Ala His Arg Lys Ala Gln Lys Ala Val Asn Leu Val Ser Phe Glu Tyr
    130              135              140
Lys Val Lys Lys Met Val Leu Gln Glu Arg Ile Asp Asn Val Leu Lys
    145              150              155              160
Gln Gly Leu Val Lys
                    165

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<210> 16  
 <211> 136  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> fib gene from strain Newman

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<400> 16
Ser Glu Gly Tyr Gly Pro Arg Glu Lys Lys Pro Val Ser Ile Asn His
  1              5              10              15
Asn Ile Val Glu Tyr Asn Asp Gly Ser Phe Lys Tyr Gln Ser Arg Pro
    20              25              30
Lys Phe Asn Ser Thr Pro Lys Tyr Ile Lys Phe Lys His Asp Tyr Asn
    35              40              45
Ile Leu Glu Phe Asn Asp Gly Thr Phe Glu Tyr Gly Ala Arg Pro Gln
    50              55              60

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Phe Asn Lys Pro Ala Ala Lys Thr Asp Ala Thr Ile Lys Lys Glu Gln
65          70          75          80
Lys Leu Ile Gln Ala Gln Asn Leu Val Arg Glu Phe Glu Lys Thr His
          85          90          95
Thr Val Ser Ala His Arg Lys Ala Gln Lys Ala Val Asn Leu Val Ser
          100         105         110
Phe Glu Tyr Lys Val Lys Lys Met Val Leu Gln Glu Arg Ile Asp Asn
          115         120         125
Val Leu Lys Gln Gly Leu Val Arg
          130         135

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<210> 17

<211> 177

<212> PRT

<213> Artificial Sequence

<220>

<223> coagulase from strain Staphylococcus aureus

<400> 17

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Ala Ser Gln Tyr Gly Pro Arg Pro Gln Phe Asn Lys Thr Pro Lys Tyr
1          5          10          15
Val Lys Tyr Arg Asp Ala Gly Thr Gly Ile Arg Glu Tyr Asn Asp Gly
          20         25         30
Thr Phe Gly Tyr Glu Ala Arg Pro Arg Phe Asn Lys Pro Ser Glu Thr
          35         40         45
Asn Ala Tyr Asn Val Thr Thr His Ala Asn Gly Gln Val Ser Tyr Gly
          50         55         60
Ala Arg Pro Thr Tyr Lys Lys Pro Ser Glu Thr Asn Ala Tyr Asn Val
65          70          75          80
Thr Thr His Ala Asn Gly Gln Val Ser Tyr Gly Ala Arg Pro Thr Gln
          85         90         95
Asn Lys Pro Ser Lys Thr Asn Ala Tyr Asn Val Thr Thr His Gly Asn
          100        105        110
Gly Gln Val Ser Tyr Gly Ala Arg Gln Ala Gln Asn Lys Pro Ser Lys
          115        120        125
Thr Asn Ala Tyr Asn Val Thr Thr His Ala Asn Gly Gln Val Ser Tyr
          130        135        140
Gly Ala Arg Pro Thr Tyr Lys Lys Pro Ser Lys Thr Asn Ala Tyr Asn
145          150          155          160
Val Thr Thr His Ala Asp Gly Thr Ala Thr Tyr Gly Pro Arg Val Thr
          165          170          175

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Lys